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| 10/042,077 | 01/08/2002 | Michael Wayne Brown | AUS920010687US1 | 6551 |
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| IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380 | | | EXAMINER THOMPSON, JAMES A | |
| | | | ART UNIT 2625 | PAPER NUMBER |

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/042,077

Applicant(s)

BROWN ET AL.

Examiner

James A. Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2002 and 27 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 7-8, 12-13 and 18-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7, 8, 12, 13, 18 and 19 each recite a "readability value". A wide variety of different characteristics can make text readable or unreadable to varying degrees. If the characters are obfuscated by more than one attribute, then how is a single value for "readability" determined? Readability is not simply a single number value. Thus, the term "readability value" is vague and indefinite.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 1-3, 5, 7-10, 14-16 and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee (US Patent Application Publication 2002/0075492 A1).

Regarding claim 1: Lee discloses receiving a request to print a document (para. 13, lines 7-13 of Lee); modifying text in the document (para. 13, lines 1-5 and para. 16, lines 1-5 of Lee) based on at least one user preference (para. 13, lines 1-5 of Lee) so that the text cannot be recognized by a character recognition algorithm (para. 17, lines 1-11 of Lee); and printing the document (para. 13, lines 7-13 of Lee).

Regarding claim 2: Lee discloses that the step of modifying comprises randomizing at least one attribute (para. 19, lines 1-5 of Lee).

Regarding claim 3: Lee discloses that the step of randomizing comprises randomizing the at least one attribute on a character by character basis (para. 15, lines 9-14 of Lee).

Regarding claim 5: Lee discloses that the at least one attribute comprises at least one of character rotation; typeface (para. 14, lines 3-17 of Lee); font size; character effect (para. 16, lines 1-5 of Lee); and spacing offset.

Regarding claim 7: Lee discloses that the at least one user preference comprises a readability value (para. 15, lines 1-9 and para. 16, lines 1-5 of Lee). The amount of the different effects that can be produced in the polygons of the characters (para. 15, lines 1-9 of Lee) and the amount of added glyph patterns that can also be selected for each polygon of the characters (para. 16, lines 1-5 of Lee) correspond to the readability value. The more effects and glyph patterns that are added to the characters, the lower the readability.

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Regarding claim 8: Lee discloses that the step of modifying comprises enabling modification techniques (para. 13, lines 1-5 of Lee) and setting modification limits based on the readability value (para. 15, lines 1-9 and para. 16, lines 1-5 of Lee). The user enables, by selection, the modifications that are performed on the polygons of the characters (para. 13, lines 1-5 of Lee). Since the modifications are set by the user, then the modification limits are also clearly set (para. 15, lines 1-9 and para. 16, lines 1-5 of Lee), which are thus based on the readability value (para. 17, lines 1-11 of Lee).

Regarding claim 9: Lee discloses receiving the at least one user preference from a user (para. 13, lines 1-5 of Lee).

Regarding claim 10: Lee discloses presenting a user interface (para. 13, lines 1-13 of Lee). Since a user can separately treat each of the constituent polygons prior to output on a printer (para. 13, lines 1-13 of Lee), some form of user interface is inherent.

Regarding claim 14: Lee discloses an apparatus (para. 13, lines 7-11 of Lee) comprising receipt means for receiving a request to print a document (para. 13, lines 7-13 of Lee); modification means for modifying text in the document (para. 13, lines 1-5 and para. 16, lines 1-5 of Lee) based on at least one user preference (para. 13, lines 1-5 of Lee) so that the text cannot be recognized by a character recognition algorithm (para. 17, lines 1-11 of Lee); and printing means for printing the document (para. 13, lines 7-13 of Lee).

Regarding claim 15: Lee discloses that the modification means comprises means for randomizing at least one attribute (para. 19, lines 1-5 of Lee).

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Regarding claim 16: Lee discloses that the at least one attribute comprises at least one of character rotation; typeface (para. 14, lines 3-17 of Lee); font size; character effect (para. 16, lines 1-5 of Lee); and spacing offset.

Regarding claim 18: Lee discloses that the at least one user preference comprises a readability value (para. 15, lines 1-9 and para. 16, lines 1-5 of Lee). The amount of the different effects that can be produced in the polygons of the characters (para. 15, lines 1-9 of Lee) and the amount of added glyph patterns that can also be selected for each polygon of the characters (para. 16, lines 1-5 of Lee) correspond to the readability value. The more effects and glyph patterns that are added to the characters, the lower the readability.

Regarding claim 19: Lee discloses that the modification means comprises means for enabling modification techniques (para. 13, lines 1-5 of Lee) and setting modification limits based on the readability value (para. 15, lines 1-9 and para. 16, lines 1-5 of Lee). The user enables, by selection, the modifications that are performed on the polygons of the characters (para. 13, lines 1-5 of Lee). Since the modifications are set by the user, then the modification limits are also clearly set (para. 15, lines 1-9 and para. 16, lines 1-5 of Lee), which are thus based on the readability value (para. 17, lines 1-11 of Lee).

Regarding claim 20: Lee discloses a computer program product in a computer readable medium (para. 14, lines 1-6 of Lee) comprising instructions for receiving a request to print a document (para. 13, lines 7-13 of Lee); instructions for modifying text in the document (para. 13, lines 1-5 and para. 16, lines 1-5 of Lee) based on at least one user preference

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(para. 13, lines 1-5 of Lee) so that the text cannot be recognized by a character recognition algorithm (para. 17, lines 1-11 of Lee); and instructions for printing the document (para. 13, lines 7-13 of Lee).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4, 6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US Patent Application Publication 2002/0075492 A1) in view of Reshef (US Patent Application Publication 2005/0114705 A1).

Regarding claim 4: Lee does not disclose expressly randomizing the attribute on a word by word basis.

Reshef discloses randomizing an attribute used to modify text so that the text cannot be recognized by a character recognition algorithm (para. 63, lines 7-11 of Reshef) on a word by word basis (figure 8b(506) and para. 67, lines 12-17 of Reshef). As shown in figure 8b of Reshef, the collection of letters that are distorted can also be used to form a particular word.

Lee and Reshef are combinable because they are from the same field of endeavor, namely modifying rendered text so that the text is recognizable to human viewer but not recognizable to

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computer-implemented character recognition algorithms. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to specifically randomize the modification attribute on a word by word basis, as taught by Reshef. The motivation for doing so would have been to prevent easy reconstruction of the text (para. 67, lines 14-17 of Reshef). Therefore, it would have been obvious to combine Reshef with Lee to obtain the invention as specified in claim 4.

Regarding claim 6: Lee does not disclose expressly that the step of modifying comprises at least one of using an uncommon font; introducing a background image or a background color; introducing a gradient film to a background of the document; reversing background and foreground of characters; and reversing background and foreground of portions of characters.

Reshef discloses that the step of modifying comprises at least one of using an uncommon font (figure 7 and para. 69, lines 1-7 of Reshef); introducing a background image or a background color (para. 69, lines 8-14 of Reshef); introducing a gradient film to a background of the document; reversing background and foreground of characters; and reversing background and foreground of portions of characters.

Lee and Reshef are combinable because they are from the same field of endeavor, namely modifying rendered text so that the text is recognizable to human viewer but not recognizable to computer-implemented character recognition algorithms. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to distort the characters, thus producing an uncommon font, and set different colors for the characters, thus inherently requiring some background color (even if white), as taught by Reshef. The motivation for doing

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so would have been to require human sensory ability to determine the text (para. 69, lines 11-14 of Reshef), which thus defeats the use of a computer-based character recognition algorithm. Therefore, it would have been obvious to combine Reshef with Lee to obtain the invention as specified in claim 6.

Regarding claim 17: Lee does not disclose expressly that the modification means comprises at least one of means for using an uncommon font; means for introducing a background image or a background color; means for introducing a gradient film to a background of the document; means for reversing background and foreground of characters; and means for reversing background and foreground of portions of characters.

Reshef discloses that the modification means comprises at least one of means for using an uncommon font (figure 7 and para. 69, lines 1-7 of Reshef); means for introducing a background image or a background color (para. 69, lines 8-14 of Reshef); means for introducing a gradient film to a background of the document; means for reversing background and foreground of characters; and means for reversing background and foreground of portions of characters.

Lee and Reshef are combinable because they are from the same field of endeavor, namely modifying rendered text so that the text is recognizable to human viewer but not recognizable to computer-implemented character recognition algorithms. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to distort the characters, thus producing an uncommon font, and set different colors for the characters, thus inherently requiring some background color (even if white), as taught by Reshef. The motivation for doing so would have been to require human sensory ability to determine

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the text (para. 69, lines 11-14 of Reshef), which thus defeats the use of a computer-based character recognition algorithm. Therefore, it would have been obvious to combine Reshef with Lee to obtain the invention as specified in claim 17.

7. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US Patent Application Publication 2002/0075492 A1) in view of well-known prior art.

Regarding claim 11: Lee does not disclose expressly that said user interface comprises a slide bar.

Official Notice is taken that a user interface comprising a slide bar is old, well-known and expected in the art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to specifically use a slide bar as part of the user interface. The suggestion for doing so would have been that a slide bar is a commonly known, user-friendly, and intuitive interface by which a user can set a variable value in a computer-based system. Therefore, it would have been obvious to combine the well-known slide bar with the teachings of Lee to obtain the invention as specified in claim 11.

Regarding claim 12: Lee discloses that the at least one user preference comprises a readability value (para. 15, lines 1-9 and para. 16, lines 1-5 of Lee) that is set using the user interface (para. 13, lines 1-5 of Lee). The amount of the different effects that can be produced in the polygons of the characters (para. 15, lines 1-9 of Lee) and the amount of added glyph patterns that can also be selected for each polygon of the characters (para. 16, lines 1-5 of Lee) correspond to the readability value. The more effects and glyph patterns that are added to the characters, the lower the readability.

Based on the Official Notice taken in the arguments regarding claim 11, upon which claim 12 depends, the user interface that sets the readability value is the slide bar discussed therein.

Regarding claim 13: Lee discloses that the step of modifying comprises enabling modification techniques (para. 13, lines 1-5 of Lee) and setting modification limits based on the readability value (para. 15, lines 1-9 and para. 16, lines 1-5 of Lee). The user enables, by selection, the modifications that are performed on the polygons of the characters (para. 13, lines 1-5 of Lee). Since the modifications are set by the user, then the modification limits are also clearly set (para. 15, lines 1-9 and para. 16, lines 1-5 of Lee), which are thus based on the readability value (para. 17, lines 1-11 of Lee).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Meador et al, US Patent Application Publication 2005/0002053 A1, Published 06 January 2005, Filed 02 July 2003.

b. Ide et al, US Patent Application Publication 2003/0099378 A1, Published 29 May 2003, Filed 20 March 2002.

c. Scott Searle, US Patent Application Publication 2003/0005302 A1, Published 02 January 2003, Filed 01 March 2002, Provisional Application filed 05 March 2001.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Thompson whose telephone number is 571-272-7441. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



15 March 2006

James A. Thompson
Examiner
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